VMTurbo Operations Manager Release Notes
Release: 5.5.2

May 6, 2016

This document describes issues that are addressed in VMTurbo Operations Manager 5.5.2 – Release Date: May 6, 2016. All builds are cumulative. Applying 5.5.2 onto any release of Operations Manager v4.0 or later will include all previous fixes. Please refer to the KB article that contains all published release notes (since v4.5):

For any questions, please contact VMTurbo Technical Support at support@vmturbo.com, or open a ticket at:

1.0 CONFIGURATION REQUIREMENTS

For the 5.5.2 release of Operations Manager, you should satisfy the following configuration requirements:

1.1. STORAGE REQUIREMENTS FOR THE OPERATIONS MANAGER SERVER

VMTurbo now states 150GB or greater as a requirement for disk storage. For Operations Manager servers hosted on VMware hypervisors, you should provide 150GB plus swap space to match the RAM allocation.

1.2. WSMAN CONFIGURATION FOR TARGET CONNECTIONS

Starting with version 5.4, Operations Manager uses WSMan to communicate with Hyper-V targets, and with the Windows Application category of targets (currently Microsoft Exchange, managed by the Application Control Module). You must enable WSMan on these targets in order to validate the connection, and to perform management on those targets. (This change does not affect management of applications discovered through Policies > Discovery > Application Discovery.)

You can enable WSMan on your targets using one of the following methods:

- Configure the WSMan service via the Group Policy Object Editor:
  - For steps that some users have found useful, see WSMan service configuration using domain GPO on the Green Circle at: https://greencircle.vmturbo.com/docs/DOC-1911
  - In summary, the steps you will perform are:
    1. Add the required snap-ins to the management console on your Active Directory controller server
    2. Create a GPO and link it to the AD domain
       - Configuration includes scope to the hosts that will have WinRM enabled, WinRM service configuration, firewall exceptions
- Configure the WSMan service via provided batch files:
For steps that some users have found useful, see Enable/Disable WinRM on remote hosts on the Green Circle at: https://greencircle.vmturbo.com/docs/DOC-1912

In summary, the steps you will perform are:
1. Download PsTools from Microsoft Technet and install it
2. Create a file that lists the hosts you want to configure
3. Download the .bat file provided on the instructions page
4. Use PsExec.exe to enable WSMAN

1.3. TRANSPORT LAYER SECURITY REQUIREMENTS

Starting with version 5.4, by default Operations Manager requires Transport Layer Security (TLS) version 1.2 to establish secure communications with targets. Most targets should have TLSv1.2 enabled. However, some targets might not have TLS enabled, or they might have enabled an earlier version. In that case, you will see handshake errors when Operations Manager tries to connect with the target service. When you go to the Target Configuration view, you will see a Validation Failed status for such targets.

In particular, we have found that NetApp filers often have TLS disabled by default, and that the latest version they support is TLSv1. If your NetApp target suddenly fails to validate after installing Operations Manager 5.4, this is probably the cause.

If target validation fails because of TLS support, you might see validation errors with the following strings:

- No appropriate protocol
  To correct this error, ensure that you have enabled the latest version of TLS that your target technology supports. If this does not resolve the issue, please contact Technical Support.
- Certificates does not conform to algorithm constraints
  To correct this error, refer to the documentation for your target technology (for example, refer to NetApp documentation) for instructions to generate a certification key with a length of 1024 or greater on your target server. If this does not resolve the issue, please contact VMturbo Technical Support.

1.4. SMI-S PROVIDER VERSIONS FOR EMC VNX AND EMC VMAX STORAGE SOLUTIONS

To connect to EMC VNX and VMAX disk arrays, Operations Manager uses EMC SMI-S providers that have the given disk arrays added to them. You should know that VNX and VMAX support different versions of SMI-S Providers:

- VNX
  For VNX and VNX2 arrays, use SMI-S version 4.6.2, based on Solutions Enabler 7.6.2. We have verified Operations Manager control of VNX block storage using SMI-S version 4.6.2 as a target.
- VMAX
  For VMAX arrays, use SMI-S version 8.1, which is included in Solutions Enabler 8.1 – We have verified Operations Manager control of VMAX storage arrays using SMI-S version 8.1 as a target.

1.5. EMC XTREMIO – SUPPORTED VERSIONS

As of this release, Operations Manager supports version 4 of the EMC XtremIO XMS 4.0 management platform.
1.6. **VSPHERE – TAG DISCOVERY CONFIGURATION**

Operations Manager discovers VMware vSphere tags, which you can use as criteria when creating groups. To discover these tags on a target, the target server must open ports 10443 and 7443.

1.7. **MIGRATION REQUIREMENTS**

Operations Manager supports two ways to upgrade to a new version:

- **Update** – Use an online or offline update to upgrade the software running on the Operations Manager server
- **Migrate** – Install a new Operations Manager VM that includes updated software, and also includes updates to the openSUSE OS or other components of the VM

**NOTE:** openSUSE ENDED ITS SPONSORED MAINTENANCE OF openSUSE 12.3 AS OF JANUARY 29, 2015. YOU MUST MIGRATE TO A NEW OPERATIONS MANAGER VM IF YOUR CURRENT INSTALLATION RUNS ON A VERSION OF openSUSE THAT IS EARLIER THAN 13.2

VMTurbo began delivering Operations Manager on openSUSE version 13.2, starting with Operations Manager version 5.0. However, you could have updated to 5.0, 5.1, 5.2, or 5.3 without performing a migration. If that is the case, then you must perform a migration to 5.4 before you can update to version 5.5.

To see the version of openSUSE that your Operations Manager is currently running on:

- Open a secure shell session to your Operations Manager VM, logged in as **root**
- In the shell, enter `cat /etc/os-release`

The results will show the OS version for that machine. If the OS is earlier than 13.2, then you **must perform a migration** to Operations Manager version 5.4 running on openSUSE 13.2, **and only after you have migrated to version 5.4** you can perform an update to version 5.5.

For information about migrating to a new version, please see the Installation Guide for Operations Manager 5.4 at the following location:


2.0 **APPLICABLE EDITIONS AND MODULES**

This update makes improvements in the following:

- Operations Manager
- Operations Manager Storage Control Module
You can apply this update to any GA version of VMTurbo Operations Manager from version 5.0 or later, if it is running on openSUSE 13.2 – Otherwise you should perform a migration. To see the support matrix of GA versions, refer to the End of Support Life Knowledge Base article on the VMTurbo Support website. To upgrade older versions of Operations Manager, contact VMTurbo Technical Support to confirm the update path.

2.1. UPDATE LINKS

If your server is able to connect to the Internet, you can apply the update through the online process by going to Admin > Maintenance > Software updates > Update. If you require an offline update, please go to the ANNOUNCEMENTS Knowledge Base article:
https://support.vmturbo.com/hc/en-us/categories/200066746-Announcements

This Knowledge Base article contains links to announcements for different versions of Operations Manager. If there is no announcement or link for the current version of Operations Manager, please contact Technical Support.

2.2. RELATED KNOWLEDGE BASE ARTICLES

• How to check for a VMTurbo Software Update:
• How to perform an offline update:
• Release Notes:
  https://support.vmturbo.com/hc/en-us/articles/203612853
• Product Documentation:
  https://support.vmturbo.com/hc/en-us/articles/200681456
• End of Support Life:

3.0 KNOWN ISSUES

• Customer Issue: 9103

After updating Operations Manager, drag-and-drop to create a custom dashboard can sometimes fail. As you drag a panel into the new dashboard, the user interface doesn’t let you drop the panel into the dashboard.

After an Operations Manager update, each user of that Operations Manager installation should clear the local Adobe Flash cache in his or her browser. This insures that the Operations Manager user interface is fully refreshed in the browser.

To clear the cache the user can open the Flash Settings Manager locally on his or her system, or can access the Settings Manager through the following Adobe site:
For more information about the Adobe Flash Settings Manager, see:

4.0 ENHANCEMENT REQUESTS

This release implements the following enhancement requests.

- Customer Issue: 7119
  This release introduces the VM Group RightSizing Info report – You can scope the report to a group of VMs.
- Customer Issue: 9034
  This release introduces a setting for Disk Array IOPS. This is a global setting that sets the IOPS capacity for all disk arrays the Operations Manager discovers in your environment. To override this setting, you can select a group of datastores for the given disk array and specify a value for the generic IOPS Capacity setting.

5.0 ISSUE RESOLUTIONS

This release includes resolutions for the following issues.

5.1. OPERATIONS MANAGER

These resolutions apply to all editions of Operations Manager.

5.1.1. RESOLVED PROCESSING ISSUES

- This release includes performance improvements when discovering large inventories.
- For Datastore Browsing, you can specify which files to ignore. Operations Manager does not ignore vmdk files that are identified by the regular expression, *.-flat\.vmdk.
- In aggregated deployments of Operations Manager, when you create a scoped user from the aggregating instance, the scope definition does not appear in the associated user accounts in the underlying control instances.
- Customer Issue: 11289
  In Operations Manager 5.5, the Scope dialog box fails to show groups based on annotations that are defined in vCenter Server.
- In some circumstances after executing a vMotion, Operations Manager performs discovery updates on unrelated hosts. To improve performance, Operations Manager no longer performs these unrelated discovery updates.
- Customer Issue: 12444
  - For Hyper-V environments, Operations Manager fails to execute a move action for a Replicated VM, where replication is performed via the Hyper-V Replica feature
  - For a Replicated VM on Hyper-V, after executing a move directly via the hypervisor (not through Operations Manager actions) then Operations Manager discovery incorrectly identifies the moved VM.
5.1.2. RESOLVED API ISSUES

- When modifying plans via the REST API, calls to disable host or storage provisioning or suspension fail to affect the plan.
- The REST API does not recognize entity unique IDs that include a period character in them.
- This release updates the REST API to express multiple filters for groups. To add multiple criteria, separate the criteria with a vertical OR bar. For example, POST the following URL to create a dynamic group of VMs whose names start with the letter "d", and that have 4 VCPUs:
  
  https://<OpsManAddress>/vmturbo/api/groups?groupName=MyMultiGroup&seType=VirtualMachine&xmlId=vmsByName|vmsByNumCPUs&expVal=d.*|=4

5.1.3. RESOLVED PLANNING ISSUES

- Projection plan results omit any clusters that don't show a projected change. This is confusing because it seems that the plan has incorrectly omitted the given cluster. Instead, the plan results should show the cluster, and show that it has no projected changes.
- Under some circumstances, users cannot delete an existing plan.
- Under some circumstances Operations Manager cannot load a saved plan.
- After adding workload demand to a plan via the Flip To Editor option in the Modify Demand dialog box, the plan can fail to place the added workload even if you enable provisioning of hosts and storage.

5.1.4. RESOLVED USER INTERFACE ISSUES

- Customer Issue: 12151
  When you have set a custom template for Policy View > Cluster Capacity, under some conditions after restarting Operations Manager the user interface shows the default template instead of the template that you specified.
- In the Assure Performance dashboard, the Health Chart does not display a pie chart for historical data (after you adjust the time slider).
- Utilization charts only show values for a single provider. For example, assume a VM that uses multiple datastores -- The utilization chart only shows values for a single datastore. As a fix for this issue, Operations Manager now calculates the average utilization from the multiple providers.

5.2. NEW USER INTERFACE

These issue resolutions apply to the New User Interface. VMTurbo provides access to our new User Interface design, and we encourage you to use it and provide feedback. We list improvements to known issues here.

- The incremental search for setting scope on a plan does not respond correctly to type-in.
- When displaying Clusters by Risk, the lowest-risk clusters appear at the top of the list -- This list should show the highest-risk clusters first.
- Customer Issue: 11720
  In the Policy View, for Select Cluster Capacity you can set the number of clusters to plan against for the Cluster Capacity dashboard. Setting this number to zero does not disable the nightly Cluster Capacity planning process.
- There are some recommended actions that Operations Manager cannot execute automatically because there is no exposed API for the given action. However, the user interface does not grey out the option to have Operations Manager execute the action.
- The Number of Actions chart (to show how many recommended actions have been executed in your environment) should display even when no actions have been executed.
5.3. STORAGE CONTROL MODULE

These issue resolutions apply to the Storage Control Module.

- For EMC VMAX targets, Operations Manager floods the log with unnecessary messages.
- **Customer Issue: 12231**
  Under some circumstances for NetApp targets that run Data ONTAP version 8.3.1 in C-Mode, Operations Manager fails to collect storage data.
- In NetApp environments, if the NetApp administrator deletes a LUN from the disk array, Operations Manager does not respond to the event and rediscover the storage resources.